DOCUMENT RESUME

ED 150 172 TM 006 876

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TITLE Major Assumptions of Mastery Learning.
PUB DATE Mar 75
NOTE 10p.; Paper presented at the Annual Meeting of the Southeast Psychological Association (Atlanta, Georgia, March 27-29, 1975)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Educational Philosophy; Educational Practice; Elementary Secondary Education; Grouping (Instructional Purposes); Group Instruction; *Individual Differences; Individualized Instruction; *Learning Processes; *Mastery Learning; School Role; Student Role; Teacher Role; *Teaching Methods

ABSTRACT

Mastery learning can be described as a set of group-based, individualized, teaching and learning strategies based on the premise that virtually all students can and will, in time, learn what the school has to teach. Inherent in this description are assumptions concerning the nature of schools, classroom instruction, and learners. According to the author, in mastery learning, both the teacher and learner are responsible for the desired learning. Moreover, differences in learning among individuals are, in fact, differences in the amount of time it takes them to learn. This amount of time is based upon three factors: his or her previous learning, his or her interest or confidence in learning the skill, and the quality of the instruction. Schooling is a purposeful activity, which should develop talent rather than select and categorize it. Instructional grouping practices often violate mastery learning's assumptions about individual students. (Author/MV)

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ED150172

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Major Assumptions of Mastery Learning

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Paper presented as part of a symposium entitled "Various Interpretations of the Mastery Learning Model" at the Southeast Psychological Association Annual Meeting, Atlanta, Georgia, March 27 - 29, 1975.

TM006 876

Abstract

The purpose of the paper is to explore the major assumptions underlying the conception of mastery learning. Mastery learning is defined and assumptions concerning the nature of classroom instruction, the nature of the school learner and the nature of schooling are clarified.

Major Assumptions of Mastery Learning

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The purpose of this paper is to briefly explore the major assumptions which underly the conception of mastery learning as resurrected by Bloom in 1968 and made increasingly more practical in 1971 by Block and 1975 by Block and Anderson. Let it be clear from the outset that while many of the assumptions put forward are based solely on a philosophy of learning, a few, expecially those concerning the nature of the learner, are supported by empirical evidence.

Mastery learning can be described as a set of group-based, individualized, teaching-learning strategies which is based on the premise that virtually all students can and will learn what the school have to teach. Inherent in this description are assumptions concerning the nature of classroom instruction, in general, and learners, in particular. The first two sections of this paper will focus on these two sets of assumptions. The final section of the paper will discuss basic assumptions concerning the nature of schooling.

Assumptions concerning classroom instruction

Mastery Learning is a group-based, yet individualized, instructional system. It takes place in a classroom which contains one teacher and 25 to 35 students. Minimal learning goals, or objectives, are set for all students in the classroom and attempts are made to individualize instruction within the group context and within various time constraints. The class as a whole moves from unit to unit with the individualization of instruction emphasized within each unit and not among units. This emphasis

on a group-based approach to school learning is based on a belief in certain "facts" about schooling. First, schools are organized around grade levels. Second, schools are organized around relatively fixed curricula at each grade level. Third, schools are organized around relatively fixed time periods within which the teacher must "deliver" the curriculum at each grade level. Finally, school are classroom based; the fact is that most school learning takes place in groups, usually 25 to 30 students per group.

Mastery learning is a teaching-learning strategy. Both the teacher and the learner are responsible for the desired learning. Too often there is a tendency to blame either the student (e.g. "he's too dumb to learn") or the teacher ("he's a poor teacher") for students' failure to learn. The philosophy underlying mastery learning implies that school learning takes place in a social context. Within this context, there exists the teacher, a group of potential learners, and something to be learned. Both teachers and learners are responsible for the learning that occurs or fails to occur within that social context. Both groups must understand specifically what their responsibility is and how the responsibilities are related. Some educators believe that the total responsibility for learning in the classroom falls on the shoulders of the teacher. These individuals are those who want to make teachers "accountable" for learning (as if teachers are the sole determinant of learning in the classroom). This is a simplistic view of classroom learning. Perhaps in example will help to clarify the limitations inherent in the teachers responsibility.

Suppose a group of expert surgeons came together and decided upon the "ultimate" procedure to perform operation Q. In addition, suppose that the procedure is performed a number of times by various surgeons, each time with the same successful result. How, suppose that a particular surgeon performs operation Q on an individual in need of such an operation.

Several other surgeons, equipped with a behavioral checklist, observe the entire operation. At the end of the operation they are in complete agreement that the operation was performed successfully. The patient dies. Is the physician responsible for the death of the patient? I think not. There are too many uncontrolled variables which are present in the situation. In a similar manner, teachers are but one factor (albeit a very important one) in school learning. For learning to take place in the classroom, both the teacher and the learner must assume responsibility.

Assumptions concerning the learner

Inherent in the basic definition of mastery learning previously noted is an assumption concerning the nature of the learner that virtually all students can and will learn what the schools have to teach. This assumption is based on the belief that individual learners do not differ a great deal in their capacity to learn what the school have to teach them. The term capacity is used here in the sense that students who lack the capacity to learn to read, for example, can never learn to read. This is not to imply that mastery learning advocates do not recognize individual differences. Rather, this is to say that the differences which exist among individuals are not differences in learning capacity. The differences among individuals in learning are, in fact, differences in the amount of time that it takes them to learn. Virtually all students have the capacity to learn how to read, it simply takes some students longer than it does others. Research evidence exists which supports this belief (Zeaman and House, 1963; Anderson, 1975).

The amount of time it takes a student to learn a particular skill or ability is believed to depend almost totally on three factors: (1) his previous learning which is related to, and required for, the present learning; (2) his interest in learning the skill or ability and confidence

in his ability to learn it; and (3) the quality of the instruction. In other words, if we insure that the student possesses a high degree of the relevant prior learning, pique his interest in the learning, provide him with confidence in his learning ability through successful prior experiences, and give him optimal quality of instruction, it is possible to reduce the amount of time he requires to learn a given learning task. While capacity seems to be a very stable characteristic of the learner; time to learn seems to be a highly alterable and changeable characteristic. This is the view of the learner which is central to mastery learning. The move from notions of capacity to those of time to learn places the potential effect of schooling in a far more optimist light than has been previously the case (Coleman, 1966).

Assumptions concerning schooling

First, schooling is a purposeful activity. Students are in schools for some reason or set of reasons. One of our major problems in education today seems to stem from our inability to agree on what that reason (or those reasons) are. Given the view of the learner previously described, these reasons for schooling become essential before we proceed any further in education. We must make decisions concerning what schools actually should teach to all students.

According to advocates of mastery learning, the major purpose of schooling is to help the learner to interact effectively with his environment and to attain and perform effectively in three sets of socio-cultural roles"...those which one's society will normally assign one, those in the repetoire of one's social system one may appropriately aspire to, and those which one might reasonably eleaborate for oneself" (Inkeles, 1066). Block (1974) has stated that the preparation of the learner for

both self-chosen and socially-imposed roles implies that the individual must be provided with a broad base of skills and abilities. In fact, the broader this base, the more opportunities the individual will have to move in the various directions that he might choose.

Further, the preparation of individuals for present as well as future roles implies that this broad base be composed of two distinct sets of skills and abilities. One set will enable the individual to function effectively in assigned or self-elaborated roles. A second set will enable the individual to acquire additional skills and abilities that he might need to handle a variety of new roles that might emerge in the future. These skills and abilities must be sampled from of the various domains of learning: cognitive, affective, psychomotor, and interpersonal.

A second assumption concerning schooling in general is that schooling should develop talent rather than select it. Schooling, today as in the past, functions mainly as a selective institution. The academic "sheep" are separated from the "goats" at a very early age. First grade classes are grouped for reading with groups being given such names as "bunnies," "robins," and "squirrels." The rationale given for such grouping practice is that each learner will be able to learn to the extent of his capacity. While this rationale has a nice "ring" to it, it violates the basic assumption of mastery learning concerning the nature of the learner.

The actual reason for grouping seems to be to help the "sheep" become smarter and the "goats" become relatively dumber. We are quite busy in schools today labeling individuals for the purpose of selection. In contrast to this practice, mastery learning advocates assume that the purpose of schooling is, in fact, to create talent; to help all of our students achieve a level of competence to help them live successfully in today's complex society.

Some closing comments

Underlying mastery learning as a teaching-learning strategy are very different conceptions of the learner and schooling than those implicit in current educational practice. Despite these differences, mastery learning advocates are not ready to "de-school" society (as has been suggested by critics such as Illich, 1971, and Holt, 1964). Rather, mastery learning attempts to combine this philosophical "idealism" with the harsh "realism" of life in the classroom.

Because of this attempted union mastery learning warrants careful consideration as an alternative model of schooling, a model which will help us move toward the accomplishment of the primary function of schools in a democratic society, the provision of an educated society.

References

Anderson, L. W. An Empirical Investigation of Individual Differences in Time to Learn. Journal of Educational Psychology, 1976, 68 (2), 226-233.

Block, J. H. (Ed.) Mastery learning: Theory and practice. NY: Holt, Rinehart, and Winston, 1971.

Block, J. H. A view of education. Unpublished manuscript, University of California, Santa Barbara, 1974.

Block, J. H., and Anderson, L. W. Mastery learning in classroom instruction. NY: Macmillan, 1975.

Bloom, B. S. Learning for mastery. Evaluation Comment, 1 (2), 1968.

Coleman, J. S. Equality of opportunity. Washington, D. C: U.S. Government Printing Office, 1966.

Holt, J. How children fail. NY: Pitman, 1964.

Illich, I. D. Deschooling society. NY: Harper and Row, 1971.

Inkeles, A. Social structure and the socialization of competence. Harvard Educational Review, 1966, 36, 265-283.

Zeaman, D., and House, B. J. The role of attention in retardate discrimination learning. In N. R. Ellis (Ed.) Handbook of mental deficiency. NY: McGraw-Hill, 1963.